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WEST BRIDGFORD

Urban District Council.

ANNUAL REPORT

OF THE

Medical Officer of Health,

FOR THE YEAR 1896.

Nottingham :

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WEST BRIDGFORD

Urban District Council.

1896.

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REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1896.

MR. CHAIRMAN AND GENTLEMEN,

I beg to present to you my Annual Report for the year 1896. The year has been rather an uneventful one, no very striking undertaking having been executed. Nevertheless, much useful work has been done, and your labours in Council and in Committee have been both constant and arduous.

During the year I have exercised a general supervision over the sanitary condition of the parish, and have been constantly associated with your Sanitary Inspector, in the abatement and removal of sanitary defects and nuisances. The rectifying of the commoner insanitary defects in dwellings has formed a fair share of my work. I am pleased to be able to record a perfect willingness, on the part of property owners, to remedy any defects to which their attention is called without a statutory notice being issued.

I have presented to your Council quarterly reports, dealing with vital statistics and other matters of public health. I have also presented to you special reports dealing with the sewers in your parish, and with the epidemic of measles.

From a statistical point of view, the year 1896 has a very satisfactory record, as regards the death-rate, which was again a very low one, in spite of the fact that in the early part of the year there was a sharp epidemic of both Scarlet Fever and Diphtheria, which had to be met, without any public means of isolation; while the year closed with measles exceedingly prevalent in your midst.

The Sewage Farm.

At the recent Local Government Board enquiry, the Inspector is reported to have said, that your Council should obtain more land for the Sewage Farm. Its present extent is 18 acres. Some authorities estimate that one acre should be allowed for every 100 inhabitants. At this estimate your farm is too small. Other authorities state that when sewage is applied in its crude state, as it is here,—that is, without first being clarified by filtration, one acre should suffice for 1000 inhabitants. This is my own view, and I am therefore of opinion that with proper attention to the irrigation of the land, your present farm will be sufficient for several years. The land on the east side of the farm is of a stiff retentive clay, and should be frequently broken up, and if necessary mixed with ashes, sand or lime, so as to make it more porous. The farm at the present time shows no signs of super-saturation, and on my visits to it, I have always found the effluent so clear and innocuous in character, that it could be discharged into the adjacent streams without creating a nuisance. The farm is never, however, likely to pay. The expense of keeping the land in a proper state of efficiency is very great both as regards plant and labour. It is found that all sewage farms are carried on either at a considerable public loss or that the tenant must be subsidized. “Farming at a profit” as applied to sewage farms is out of the question,

Pumping Station.

There is nothing new to report with regard to the pumping station. After some initial difficulties the new pump was started in February last, and has continued to do the bulk of the work ever since in a very satisfactory manner. The pumps work from 7 to 9 hours daily, from 7 a.m. to 5 p.m., with occasional intermissions. When the Lady Bay estate has been sewered, and all the sewage and waste water which now passes into the cesspools passes into the new sewers, the work of pumping will be greatly increased.

The sewage is screened before it reaches the pumps. The material which does not pass through the screen is raked out of the well and ultimately finds its way on to the adjoining land for manurial purposes.

There has been no break-down during the year, and at the present time all the plant is in thorough repair and in good working order. It is a striking fact that Camps, the engineer at the Station, has never been absent from his post on account of illness for a single day for over nine years.

Owing to the isolated position of the station, and owing also to the fact that it and the valuable plant it contains is left unprotected at night time, I would suggest to your Council the advisability of building a cottage close to the station, as a place of residence for the engineer.

Sewage Disposal.

In my last year's report I entered fully into the question of sewage disposal, and strongly urged your Council to adopt as far as possible the water carriage system by means of slop or waste water closets. At that time only two of these were in use in the parish. During the past year this number has increased to about

sixty. The experience of those who have had this system in use is, I believe, entirely favorable, not only in West Bridgford, but in other towns and parishes throughout the country.

The advantage of waste water closets over the privy system is too obvious to mention, while the advantage over the ordinary indoor w.c. may be briefly summed up as follows :

- (1) In the severest winter the slop water closet does not freeze.
- (2) The cost of maintenance is less.
- (3) There is a saving of town or corporation water.
- (4) There is less volume of sewage to be disposed of, and therefore a saving of ratepayers' money.
- (5) There is less liability to get out of order.

Efficient slop water closets have therefore undoubted advantages over the indoor w.c., while the conservancy system of sewage collection and disposal, by means of cesspools and privies is insanitary and costly.

The question is one of immense importance not only to property owners but to public bodies.

I would strongly urge that it be imperative that all dwellings in course of erection or to be erected in your parish should be provided with waste water closets where practicable. The privy system constitutes the one sanitary blot in West Bridgford, and its extension would be most undesirable. With each house provided with either an indoor w.c. or with an outdoor waste water closet, and with a properly constructed, detached building in the rear for the reception of ashes and other *dry* refuse, your parish would attain as high a degree of sanitation as is possible.

Sewers.

During the year, and especially during the summer months, the sewers were regularly flushed. Complaints have been made from time to time of smells arising from the manholes in the roadways. One of the objects of these manholes is to act as as ventilators to the sewers, and of course they must at times give off a certain amount of sewer gas, according to the pressure of gas within them, and to the direction of the wind. Surely it is better to have the sewer gas escape by these manholes and get diluted with atmospheric air, and so rendered harmless, than to have them, as has been attempted, blocked up, and the sewer gas consequently driven into the dwellings. It is not the occasional smell which anyone may notice on passing a manhole or a street grating which is dangerous to health : it is rather the slow and insidious escape into our dwellings, and especially into our sleeping apartments, which causes disease. As an experiment, however, and to obviate as far as possible the objection to these smells, your Council has had erected two ventilating shafts in connection with the main sewers. These shafts are about 50 feet high, and so far they have acted well. A further experience of these will guide your Council, whether they should be adopted in other parts of the parish. During the warm weather blocks of Carberzone were placed in the manholes, and these seemed to check to a certain extent the smells arising from the sewers.

Scavenging.

There is nothing new to report in the system of scavenging. The contract for carrying out the work was £350, against £230 for 1895. The night-soil is used by the contractor for manuring his own land. Should it at any time happen that there was no demand for this, an inexpensive and workable scheme could be evolved, whereby it could be chemically treated and used for mixing with the soil of the sewage farm.

STATISTICS OF ASH-PIT EMPTYING.

Privies and Ashpits emptied	1088	average of	21	per week.
Tub closets	„	468	„	9 „
Dry Ash-tubs	„	1042	„	20 „
Cesspools	„	69		

Number of loads removed 1248, at an average cost of 5/8 per load.

The Contractor has had wooden bottoms placed on the zinc pails used for moving the excreta so as to render the work during the night as noiseless as possible. Scavenging takes place between the hours of 10 p.m. and 7 a.m. A pot cart with bell attached goes around the parish every Friday. It is very desirable that the householders should take advantage of this, and that much of the waste paper which now finds its way into the ash-tubs should be burned in the kitchen fire.

Roads.

In my previous report I have adverted to the excellent condition of the roads in the parish, especially to the new roads. During the past year these have begun to show decided evidence of wear and tear. The depressions caused by the laying of Gas and Water pipes to the houses still remain. This applies particularly to Henry Road and Musters Road, where the depressions are now so deep as to be actually a source of danger. In wet weather the condition of Musters Road, until lately the best road in the parish, is little better than an ordinary turnpike. It is much to be regretted that your Council is still unable to prevent the passage along this road of heavy traffic to and from Nottingham. Bridgford Road between Trent Bridge and the Railway Bridge is in need of immediate repair, both as regards the carriage-way and the footpaths; while the north side of Rectory Road near the almshouses is in wet weather several inches deep in water. Trent Boulevard and the roads connected with it are in a deplorable state.

On the other hand, several improvements have been effected during the year. Charnwood Grove and Park Avenue have been relaid, curbed and channelled, while the footpaths of Loughborough Road, by the joint efforts of your Council with the County Council, have been greatly improved.

By a resolution carried by your Council at its meeting in December, it was proposed to make a tarred footpath on this road from Wilford Lane to the last house on the right-hand side, going towards Ruddington, your Council sharing the expense with the County Council. It is to be hoped that the County Council will look favourably on this proposal, and that the early Spring will see this desirable improvement effected.

At the present time Stratford Road is in the hands of the Contractor. There is much work before your Council in the direction above indicated, and I would suggest that the depressions in Musters and Henry Roads should have your early attention. The contract for repairing Bridgford Road and the footpaths has been fixed, and only awaits the sanction of the Local Government Board to the necessary loan to enable your Council to proceed with this much needed improvement.

Some amount of friction between your Board and the property owners on the Lady Bay estate has prevented your Council from proceeding with the work of making and sewerage the roads in this part of the parish. Happily this is now settled, and it is hoped that the recent enquiry held by an Inspector of the Local Government Board to sanction a loan of £12,000 to carry out this important work will be successful.

Water Supply.

With the exception of an extension of several of the mains, there is little alteration to report in the supply of corporation

water. The main in Melton Road has been continued to the Railway Bridge. There is a 'junction' opposite the end of Musters Road from which a supply can be taken to any houses which may be erected at the south end of this road.

The total length of mains (3 and 4 inch pipes) which have been laid during the year is 1013 yards, as follows ;—

Henry Road	..	..	230 yards
Melton Road	..	..	162 „
And on the Lady Bay estate—			
Trent Boulevard	..	..	300 „
Melbourne Road	..	..	221 „
Woodland Road	..	..	100 „
			<hr/>
			1013 „
			<hr/>

There is a good pressure of water all over the parish, especially on the allotments, and in the case of fire a great pressure can be had. Calculating 20 gallons per head of the population per day for all purposes, the amount supplied to the parish would be over 91,000 gallons per day. The present supply is ample for a population of 15,000, so that so far as the corporation supply is concerned, it will be sufficient for the next 14 years, provided the population goes on increasing at its present rate, which is extremely unlikely.

Some of the cottages in the old part of the parish still get their supply from wells, and on the allotments many of the houses have to depend on wells sunk in their gardens. It is desirable that every house should get its supply from a public source, when these wells which are always liable to contamination can be disused. On the allotments, no further extension of the mains will be made until the roads have been made and sewered.

Lighting and Gas Supply.

During the year about 1,600 yards of additional mains have been laid, and since these additions have been made the complaints of deficient supply, which were formerly common, have not been heard.

There is now a steady and sufficient pressure at all times in the mains throughout the district, but West Bridgford grows so rapidly that it will be necessary from time to time to enlarge the mains in accordance with the growth of population.

The lamps have increased from 112 to 121 during the year; that is, an increase of nine lamps. It is a matter of interest for you that the price of gas for *public* lighting has been reduced twopence per 1,000 feet at Christmas last, and that therefore there will be a considerable diminution in the cost to the West Bridgford District Council, which I suggest might very well be spent in enlarging the flames of the lamps in the more important streets from five feet to six feet per hour, as has been done in the borough. From a six-foot flame, a very much larger proportion of light per cubic foot of gas is obtained than from a five-foot flame, and the difference would at once be appreciable, and, I think, satisfactory to the residents of the neighbourhood. During the winter months the lamps are alight until 3 a.m.

Population.

The basis of all vital statistics rests upon a correct estimate of the population. If this estimate is incorrect the birth-rate and death-rate will alike be unreliable. It is therefore of great importance to know as near as possible the actual population. At Midsummer 1896 there were 965 houses on the rate book as against 855 and 740 at the same periods of 1895 and 1894 respectively. Of the 965 houses, 92 were on the Lady Bay estate.

The last census return showed an average of $4\frac{3}{4}$ inhabitants to each house. This would give a total population at Midsummer last of 4,583, and it is on this figure that I base my vital statistics for the year.

At the present time there are 92 houses in course of erection, 26 of these being on the Lady Bay estate.

As showing the continuous increase of the population I give you the following table:—

1891	Population	2,503	(census)	...	<i>Increase.</i>
1892	„	2,800	(estimated)	..	297
1893	„	3,230	„	...	430
1894	„	3,515	„	...	285
1895	„	4,061	„	...	546
1896	„	4,583	„	...	522

Owing to the number of houses at present in course of erection and likely to be erected during the present year, the rate of progress as regards population is likely to be maintained for the present.

Vital Statistics.

DEATHS.—41 people died during the year, 22 males and 19 females, against 32 deaths during 1895. Of the total deaths 9 died before completing the first year of life, 14 died over 60 years of age, 8 died over 70 years of age, 2 over 80, and one aged 91 years. Of the infants 2 died of diarrhœa, 2 of congenital debility, 2 of pneumonia, and 8 of convulsions. Of the adults 8 died of heart disease, 9 died of diseases of the respiratory organs, including 2 cases of consumption. There were 2 fatal cases of cancer. One child died of scarlet fever, one of diphtheria, and one

of measles. One inquest was held, and two deaths were uncertified. Of the total deaths

18	occured	in the	1st	quarter,
10	„	„	2nd	„
6	„	„	3rd	„
7	„	„	4th	„

The death rate is 8·9 per 1000 as against 7·8 for 1895, and 10·8 for 1894. The continued low death-rate is exceedingly satisfactory. Your parish will maintain its proud boast of having not only the lowest death-rate of any parish or district in the county, but one of the lowest, if not actually the very lowest death-rate in the Kingdom. I give you the following table for comparison :

West Bridgford	Death-rate	8·9	per 1000
Beeston	„	12·5	„
Carlton	„	15	„
Nottingham	„	17·2	„

Births.

During the year 93 children were born—40 males and 53 females, as against 88 births in 1895 and 91 in 1895. Notwithstanding the continued increase in the population the birth-rate appears to be about stationary. The rate per 1,000 is 20·8 as against 21·2 for 1895.

West Bridgford	Birth-rate	20·3	per 1000
Beeston	„	21·7	„
Carlton	„	34·2	„
Nottingham	„	28·8	„

The West Bridgford birth-rate is the lowest in the county.

Infectious Diseases.

Until the year 1895 the almost complete immunity of your

parish from all forms of infectious diseases was quite phenomenal. During 1894 only 8 cases were reported ; in 1895 the number had increased to 20 ; while for the year 1896 there were 35 cases reported. In my Annual Report for 1895 I remarked as follows :

“ With the opening of the New Board Schools a considerable increase in the number of infectious diseases is almost certain to take place. Any school with a large attendance of children is apt at some time to become a focus of infection.”

This applies specially to Scarlet Fever, in a lesser degree to Diphtheria, but has no bearing on Typhoid Fever.

Of the 35 cases during the past year, 16 were cases of Scarlet Fever, 11 of Diphtheria, and 8 of Typhoid ; of the total number 20 occurred in the first quarter of the year, 8 in the second quarter, 5 in the third quarter, and 2 in the last quarter. Of the Typhoid cases, 2 occurred in one family, and were, it is supposed, imported cases. The other 6 cases could not be “ grouped ” as they occurred in various parts of the Parish. Only one case of infectious disease, a mild case of Typhoid, occurred on the allotments. Two of the cases of Scarlet Fever were reported to me as cases of “ Scarletina.” The sooner this unfortunate term is abandoned the better it will be for the public.

Of the total number of infectious diseases, only 2 proved fatal, one case of Scarlet Fever and one case of Diphtheria.

I have arranged that if anyone attending any of the schools in the parish is attacked by an infectious disease, the fact is at once notified to the school, and no member of that family is allowed to remain at school until all danger has passed, and until I have given a certificate. This will prove a valuable help towards arresting at the very outset any future epidemic of either of those diseases.

Measles.

Under the provisions of the "Notification of infectious diseases Act" Measles is not yet included. The last six weeks of the year was marked by a severe epidemic of this disorder, fortunately of a mild type. The disease became so widespread that no means short of closing the public Schools and the Sunday Schools was likely to check it. Although your Council has no power to close the latter, my recommendation that they should be closed was cordially agreed to. Measles is far more likely to be spread through the agency of Schools than any other disease. Accordingly the necessary order for closure was made on the 6th December and the Schools remained closed until the 18th of January, with the result that the epidemic rapidly abated. There was only one death from Measles. At the present time the parish is, as far as I know, free from the disease.

Hospital for Infectious Diseases.

At the end of the year the Hospital for the reception of cases of infectious diseases, which has been built by the Basford Rural District Council, was opened. It appears however that this Hospital will not be available for patients from any of the Urban districts within the Basford Union. Your Chairman has made formal application for terms, for patients from West Bridgford, but up till the present time without effect. I would advise that a formal application should be sent from your Council on this matter. Failing this your Council might consider the advisability of combining with the adjacent Urban districts of Carlton and Beeston, in formulating some plan of hospital accommodation for your infectious cases, if these bodies feel disposed to meet you,

I am bound however to admit, that the necessity is not so urgent in West Bridgford as it is in other districts, for the ex-

perience of the last two years proves, that it is possible to isolate cases of infectious disease, in the great majority of the houses, without the disease spreading, although the necessity to do so gives rise to much trouble and annoyance.

Notification of Infectious Diseases.

This Act continues to work well. I have no reason to believe that any attempt is made to evade it. During the year 44 cases were notified at a cost of £5 10s. 0d. The infected bedding and clothing continues to be disinfected by the Nottingham Borough Sanitary Authority, at a cost of 10s. for each case. The work is most punctually and expeditiously performed.

Meteorology.—RAINFALL.

The year was a very wet one. Rain fell on 196 days. The greatest fall was on the 8th July, when just over 1½ inches fell. September and October were the wettest months, there being only ten days in those two months in which rain did not fall. December also was very wet having only seven dry days. February and May were the driest months of the year.

Temperature.

The 17th of June and the 20th July were the hottest days, the thermometer registering 83° and 82° respectively. The 23rd of January was the coldest day, the thermometer falling to 20° Fahrenheit.

Cemetery.

In my last year's report I mentioned a few of the more important and ambitious projects likely to require your attention in the future. I will now refer to one of those—the question of providing a suitable burying ground for the district. The existing parish graveyard may have sufficed for the wants of West Bridgford

when it was a mere hamlet with a few hundred inhabitants, but with a constantly increasing population of over 5,000, and with the encroachment upon it by the enlargement of the parish Church, and by the close proximity of the houses in and around Stratford Road, the necessity for a new place of interment becomes daily more urgent. The practice of filling a considerable area of sub-soil in the immediate vicinity of dwellings, with the bodies of the dead must it is thought be injurious to public health.

By the "Cemeteries Clauses Act" of 1847, public bodies are empowered to obtain land by compulsory purchase for the construction, drainage and management of new cemeteries, and by the "Public Health (Interment) Act" of 1879, no part of a cemetery should be constructed within 200 yards of a dwelling. By the "Public Health Act" of 1875, Urban Sanitary Authorities are empowered under certain conditions to become "burial boards" of their respective districts.

The Local Government Board in a memorandum issued in August, 1879, laid down the following as circumstances under which action should be taken:—

(1) Where in any burial ground, which remains in use, there is not proper space for burial and no other suitable burial ground has been provided.

(2) Where the continuance in use of any burial ground is by reason of its situation to the water supply of the locality or by reason of any circumstance whatever injurious to the public health.

(3) Where for the protection of the public health it is expedient to discontinue burials in any particular town, village, or place within certain limits.

The existing burial ground comes fairly within the scope of all these three sections, but especially of the first. From an unprejudiced consideration of these it is clear that the question

is ripe for discussion, if not for immediate action by your Council ; and I have felt it to be my duty as your Medical Officer of Health to bring it before you at this time. Your Council has full power on application to the Local Government Board (1) to acquire land compulsorily, and (2) to borrow money on loan to be repaid with interest by imposing a special rate.

With regard to a site, the slope at the foot of Edwalton Hill on the east of the Edwalton Road, sheltered by the hill on the south and exposed to the north and northerly winds would be an ideal spot for a Cemetery. Should the soil be found to be of a clayey and retentive nature—clay land being the worst for a burying ground,—a suitable site might be found to the south of Wilford Lane, at a point nearly equi-distant between Bridgford and Wilford. The land here is of the soft sandstone (Keuper) formation, and is therefore well adapted for the purposes of burial. There is reason to believe that a portion of this land could be purchased at a very reasonable price.

In respect to the extent of land necessary the minimum required is usually estimated at one acre for every thousand of the population. A piece of land therefore from 5 to 10 acres in size would be quite sufficient for the wants of the parish.

Licensed Houses.

During the year efforts were made to establish one or more fully licensed houses in your parish, but without success. The parish continues to be well served by the present Inn.

Conclusion.

In conclusion I would again desire to congratulate your Council on the work it has accomplished during the three years of its existence. Your past labours have been very onerous, and

with the continued growth of the parish and the amount of work still to be accomplished they must continue to be so, and your responsibilities as a public body must become yearly heavier.

Your Council meetings have been conducted with an energy and a despatch which is quite remarkable. To the Chairman and the members of the Council I would desire to express my sincere thanks for their courtesy and kindness, and to the various officials of the Council for hearty co-operation and much valued help and assistance.

I am, Gentlemen,

Your obedient servant,

WALTER HUNTER, M.D.

*To the Chairman and Members of the
West Bridgford Urban District Council,
5th February, 1897.*

